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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

PATENT NO.: 7,036,461 B2

PATENTEE: THIELERT ET AL-2 PCT

ISSUED: MAY 2, 2006

SERIAL NO.: 10/521,214

FILED: JANUARY 13, 2005

TITLE: WASTE-HEAT BOILER FOR A CLAUS PLANT

**REQUEST FOR CERTIFICATE OF CORRECTION**  
**UNDER 37 C.F.R. §1.322**

**Attn: Certificate of Corrections Branch**

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Certificate  
JUN 19 2006  
of Correction

Dear Sir:

In accordance with the provisions of 37 C.F.R. §1.322 of the Rules of Practice, which implement 35 U.S.C. 254, approval of the attached Certificate of Correction for the above-identified patent to correct the error noted below appearing in the issued patent is respectfully requested.

Most recently, in reviewing the above-identified patent, it was discovered that a typographical error appeared in the title, which should be corrected.

In particular, on the cover page, Item [54], please change "CLAUSE" to correctly read:

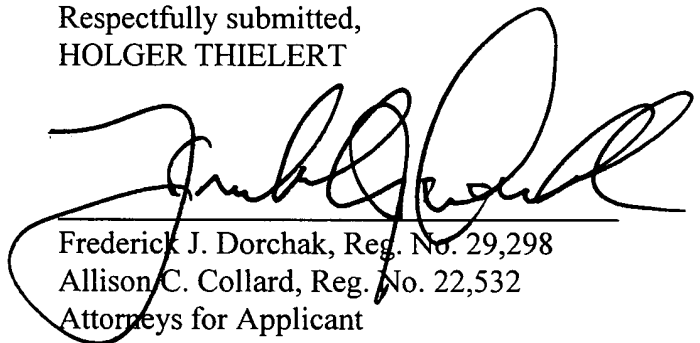
--CLAUS--.

JUN 19 2006

Since the error was the fault of the PTO, as is shown by the attached copy of the transmittal letter filed on January 13, 2005, and a copy of the first page of the Specification, no fee is required for the filing of this Certificate of Correction. However, should any additional fees be required, the Commissioner is authorized to charge such fees to Deposit Account No. 03-2468.

Accordingly, approval of the attached Certificate of Correction is respectfully requested.

Respectfully submitted,  
HOLGER THIELERT

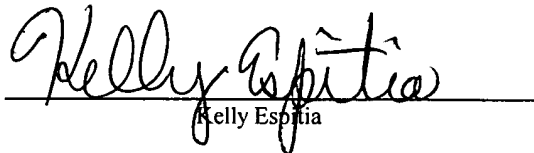


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Enclosures: Certificate of Correction in duplicate  
Copy of the Transmittal Letter filed on January 13, 2005  
Copy of the first page of the Specification

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: MAIL STOP Certificate of Corrections Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on June 12, 2006.



Kelly Espitia

JUN 19 2006

**UNITED STATES PATENT AND TRADEMARK OFFICE  
CERTIFICATE OF CORRECTION**Page 1 of 1

PATENT NO. : 7,036,461 B2

APPLICATION NO.: 10/521,214

ISSUE DATE : May 2, 2006

INVENTOR(S) : THIELERT ET AL-2 PCT

It is certified that an error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

In particular, on the cover page, Item [54], please change "CLAUSE" to correctly read:

--CLAUS--.

**MAILING ADDRESS OF SENDER (Please do not use customer number below):**

COLLARD &amp; ROE, P.C.

1077 Northern Boulevard

Roslyn, New York 11576

This collection of information is required by 37 CFR 1.322, 1.323, and 1.324. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Attention Certificate of Corrections Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

*If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.*

**JUN 19 2006**

**UNITED STATES PATENT AND TRADEMARK OFFICE  
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**JUN 19 2006**

**Waste heat boiler for a Claus system**

## Specification:

The invention relates to a waste heat boiler for a Claus system.

In a Claus system, hydrogen sulfide is converted to elemental sulfur, which condenses by means of cooling of the process gas stream and is separated in liquid form. A Claus system consists, in its fundamental structure, of a combustion chamber, a waste heat boiler, as well as at least one catalyst stage. An acid gas containing  $H_2S$  is passed into the chamber together with air and heating gas, where about 60 to 70% of the hydrogen sulfide is converted to sulfur in an exothermic reaction. The process gas leaves the combustion chamber at a temperature of approximately  $1200^{\circ}C$ , and is cooled to a temperature below  $170^{\circ}C$  in the waste heat boiler. After the condensed sulfur has been collected, the process gas is heated again and passed to a catalyst stage in which hydrogen sulfide that is still contained in the process gas is converted to elemental sulfur, at a working temperature below  $300^{\circ}C$ . The process gas that leaves

TRANSMITTAL LETTER TO THE UNITED STATES  
DESIGNATED/ELECTED OFFICE (DO/EO/US)  
CONCERNING A FILING UNDER 35 U.S.C. 371

U.S. APPLICATION NO. (if known, see 37 CFR 1.5)

INTERNATIONAL APPLICATION NO.

PCT/EP2003/004868

INTERNATIONAL FILING DATE

MAY 9, 2003

PRIORITY DATE CLAIMED

JULY 25, 2002

TITLE OF INVENTION

WASTE-HEAT BOILER FOR A CLAUS PLANT

APPLICANT(S) FOR DO/EO/US

Holger THIELERT ET AL.

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. ☒ This is a **FIRST** submission of items concerning a filing under 35 U.S.C. 371.
2. ☐ This is a **SECOND** or **SUBSEQUENT** submission of items concerning a filing under 35 U.S.C. 371.
3. ☒ This is an express request to begin national examination procedures (35 U.S.C. 371 (f)) at any time rather than delay examination until the expiration of the applicable time limit set in 35 U.S.C. 371(b) and PCT Articles 22 and 39(I).
4. ☒ A proper Demand for International Preliminary Examination was made by the 19th month from the earliest claimed priority date.
5. ☒ A copy of the International Application as filed (35 U.S.C. 371(c)(2))
  - a. ☒ is transmitted herewith (required only if not transmitted by the International Bureau)
  - b. ☐ has been transmitted by the International Bureau.
  - c. ☐ is not required, as the application was filed in the United States Receiving Office (RO/US).
6. ☒ A translation of the International Application into English (35 U.S.C. 371(c)(2)).
7. ☐ Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)).
  - a. ☐ are transmitted herewith (required only if not transmitted by the International Bureau).
  - b. ☐ have been transmitted by the International Bureau.
  - c. ☐ have not been made; however, the time limit for making such amendments has **NOT** expired.
  - d. ☐ have not been made and will not be made.
8. ☐ A translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).
9. ☒ An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).
10. ☐ A translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).

Items 11. to 16. below concern other document(s) or information included:

11. ☒ An Information Disclosure Statement under 37 CFR 1.97 and 1.98.
12. ☐ An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
13. ☒ A **FIRST** preliminary amendment.  
☐ A **SECOND** or **SUBSEQUENT** preliminary amendment.
14. ☐ A substitute specification.
15. ☐ A change of power of attorney and/or address letter.
16. ☒ Other items or information:

2 sheets of drawings  
International Search Report (English)